

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ZDPM28150-BV**

**150HP, 1800, 3PH, FL2890 , TEBC, F-3**

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	PM4057A	CD Diagram:	422927-001	Mfg Plant:	
Mech. Spec:		Layout:	617531-025	Poles:	04	Created Date:	04-10-2015
Base:		Eff. Date:	10-24-2019	Leads:			

Specs			
Catalog Number:	ZDPM28150-BV		
Enclosure:	TEAO		
Frame:	FL2890		
Frame Material:	Exposed Laminations		
Output @ Frequency:	150.000 @ 60 HZ		
	150.000 HP @ 60 HZ		
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ		
Voltage @ Frequency:	460.0 V @ 60 HZ		
	460 V @ 60 HZ		
Agency Approvals:	CCSA US		
	UR		
Auxillary Box:	No Auxillary Box		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Current @ Voltage:	168.000 A @ 460.0 V		
Duty Rating:	CONT		
Feedback Device:	RESOLVER		
Frame Prefix:	FL		

<b>Heater Indicator:</b>	No Heater		
<b>Insulation Class:</b>	H		
<b>Mounting Arrangement:</b>	F3		
<b>Product Family:</b>	General Industrial		
<b>Pulley End Bearing Type:</b>	Ball		
<b>Pulley Face Code:</b>	Standard		
<b>Shaft Ground Indicator:</b>	No Shaft Grounding		
<b>Shaft Rotation:</b>	Reversible		
<b>Motor Standards:</b>	NEMA		
<b>Thermal Device - Bearing:</b>	None		
<b>Thermal Device - Winding:</b>	Normally Closed Thermostat		

<b>Nameplate 000613006NN</b>										
	<b>DUTY</b>	<b>HP</b>	<b>RPM</b>	<b>AMPS</b>	<b>VOLTS</b>	<b>HZ</b>				
	CONT	150	1800	168	460	60				
	CONT	150	3000	168	460	100				
<b>CAT.NO.</b>	ZDPM28150-BV		<b>SPEC. NO.</b>	P28M0314						
<b>SER.NO.</b>			<b>FR</b>	FL 2890	<b>INSUL</b>	H				
<b>PH.</b>	3		<b>MAX SAFE SPEED</b>	5000	<b>AMB.</b>	40			<b>MIN. AMB.</b>	-25
<b>DESIGN NO.</b>	PM4057A		<b>TYPE</b>		<b>ENCL.</b>	TEAO-BC				
<b>S.F.</b>	1.0		<b>D.E. BRG.</b>	75BC02J30X						
<b>ENCL MOD</b>			<b>O.D.E. BRG.</b>	55BC02J30X						

Nameplate 000692000VY		
IS	<input type="text"/>	MEAS OPEN CIRCUIT VOLTAGE
		VOLTS AT <input type="text"/>
		MTR PH CURRENT SHOULD NOT
EXCEED	<input type="text"/>	AMPS RMS PEAK TO
		RPM.
	AVOID DEMAGNETIZATION	

Parts List		
Part Number	Description	Quantity
WS286673	WS P28M0314	1.000 EA
RA282881	RA P28M0314	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000NH	LABEL DIRECTION AIR FL	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
418057747A	METAL FASTENER	8.000 EA
000613006NN	RPM AC WITH CERTIFIED LOGOS	1.000 EA
000692000VY	PERMANENT MAGNET MOTOR NAMEPLATE	1.000 EA
418018122A	LABEL	2.000 EA
422927001	C/D LABEL	1.000 EA
004824015A	GREASE POLYREX EM	0.300 LB
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
036100070JA	HSHCS M8 70MM UNPLATED	3.000 EA
036100070KA	METRIC HSHCS	3.000 EA
036140001D	EYEBOLT - 360	2.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036600014AB	FTW MOTOR MTG.	2.000 EA
400638001G	WAVEN (Customer number 43699)	1.000 EA
418150003A	GREASE FITTING CAP	2.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
609830005G	TBOLT VERSION 3	4.000 EA
610490001A	.5HP,3450//2850RPM,3PH,60//50HZ,56C,3420	1.000 EA
807583003AAA	BRKT,DE,FL280	1.000 EA
807583004AAB	BRKT,ODE,FL280	1.000 EA
036000016KB	HHCSM10-1.5X16MM PLTD-280	2.000 EA
036610008AB	METRIC LCKW M6 PLTD-G508	4.000 EA
418057373A	SCREW SHEET METAL	7.000 EA
032018006CK	HHCS 3/8-16X3/4L PLATED	4.000 EA
036500008AB	METRIC H.NUT M6-1.0 PLTD	4.000 EA
708535010C	FAN COVER FL280 WITH ENCODER/RMM BLWR	1.000 EA
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
034630001AJ	1/8" PIPE COUPLING	1.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
036310010FB	RHMS TERM/BLK MTG	2.000 EA
034530016AB	P/NIP 1/8X2 PLATED - 320	1.000 EA
418057461B	PLATE, ENCODER	1.000 EA
036320008CB	M2.5 SCREW	4.000 EA
036500006AB	M4-0.7 METRIC HEX NUT	2.000 EA
036620010AB	M10 EXT. TOOTH LK WASHER	2.000 EA
074875000A	CONDUIT BOX COVER	1.000 EA
402731000A	GASK 320-400	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	4.000 EA
036000045JB	M8-1.25 X 45MM HXHCS	4.000 EA

Product Information Packet: ZDPM28150-BV - 150HP, 1800, 3PH, FL2890 , TEBC, F-3

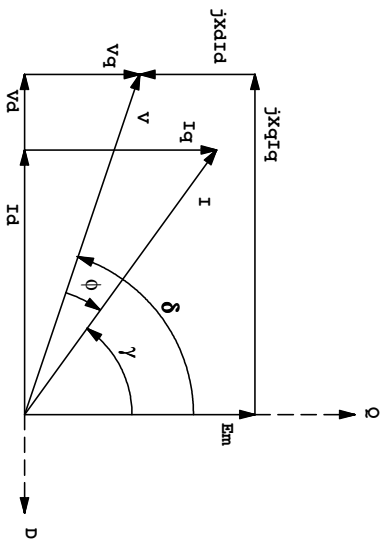
000613006NT	NAME PLATE IEC	1.000 EA
418014004A	ADAPT	1.000 EA
415000103G	TLUG	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
422962052AB	STUB SHAFT	1.000 EA
800123015A	RESOLVER DYNAPAR	1.000 EA
600164003A	WHEEL, BLOWER	1.000 EA
036600008AB	MFWSH M6 PLATED	4.000 EA
417733004J	GASKT	2.000 EA
609843001K	GASKET HANDHOLE COVER FE	1.000 EA
708535017A	FAN COVER,GRILL	1.000 EA
036000025HB	HHCS M6-1.0X25L PLTD.	4.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	3.000 EA
706320009A	CB, 2.00 CONDUIT, METRIC, SHEET METAL	1.000 EA
708533003A	PLATE, BTM FAN/BLOWER	2.000 EA
706313063A	BLOWER HOUSING	1.000 EA
410978010A	FLANGE, INLET BLOWER	1.000 EA
410978011A	GRILL, INLET BLOWER HSG	1.000 EA
406673002C	.75 CAP PLUG	1.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	3.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
034180032HA	KEY 5/8X5/8X4 L bin stocked	1.000 EA

S.O. 0	VOLTS 460	TYPE IPM	STATOR RES. @ 25°C .0328
FRAME FL2890	AMPS 166.0	ENCLOSURE TEBC	OHMS (BETWEEN LINES)
HP 150	DUTY CONT	MAX SAFE RPM 5000	
BASE SPEED 1800	S.F. 1.0	WK2 (lb-Ft <sup>2</sup> ) 10.56	
PHASE/HERTZ 3/60	AMB °C/INSUL 40/H	MAX INSTANTANEOUS OVERLOAD AMPS 498	

**VARIABLE SPEED PERFORMANCE**

HP	AMPS (rms)	RPM	GAMMA*	POWER FACT.	EFF.	VOLTS (L-L) (rms)	Em (L-N) (rms)	Iq (mH)	Ld (mH)
OpenCkt**	N/A	1800	5.0	N/A	N/A	N/A	193	N/A	N/A
OpenCkt, hot	N/A	1800	5.0	N/A	N/A	N/A	154	N/A	N/A
31.1	41.5	1800	29.6	96.1	95.5	351	154	10.6	1.70
69.6	83.0	1800	36.7	93.4	96.1	402	154	7.80	1.70
109	125	1800	40.2	91.3	96.2	428	154	6.20	1.60
150	166	1800	43.7	89.5	96.0	453	154	5.40	1.60

Remarks: TYPICAL DATA  
 CONSTANT TORQUE 0-1800 RPM, CONSTANT POWER 1800-3000 RPM  
 200% OVERLOAD BELOW BASE SPEED TAPERED TO 100% AT 3000 RPM

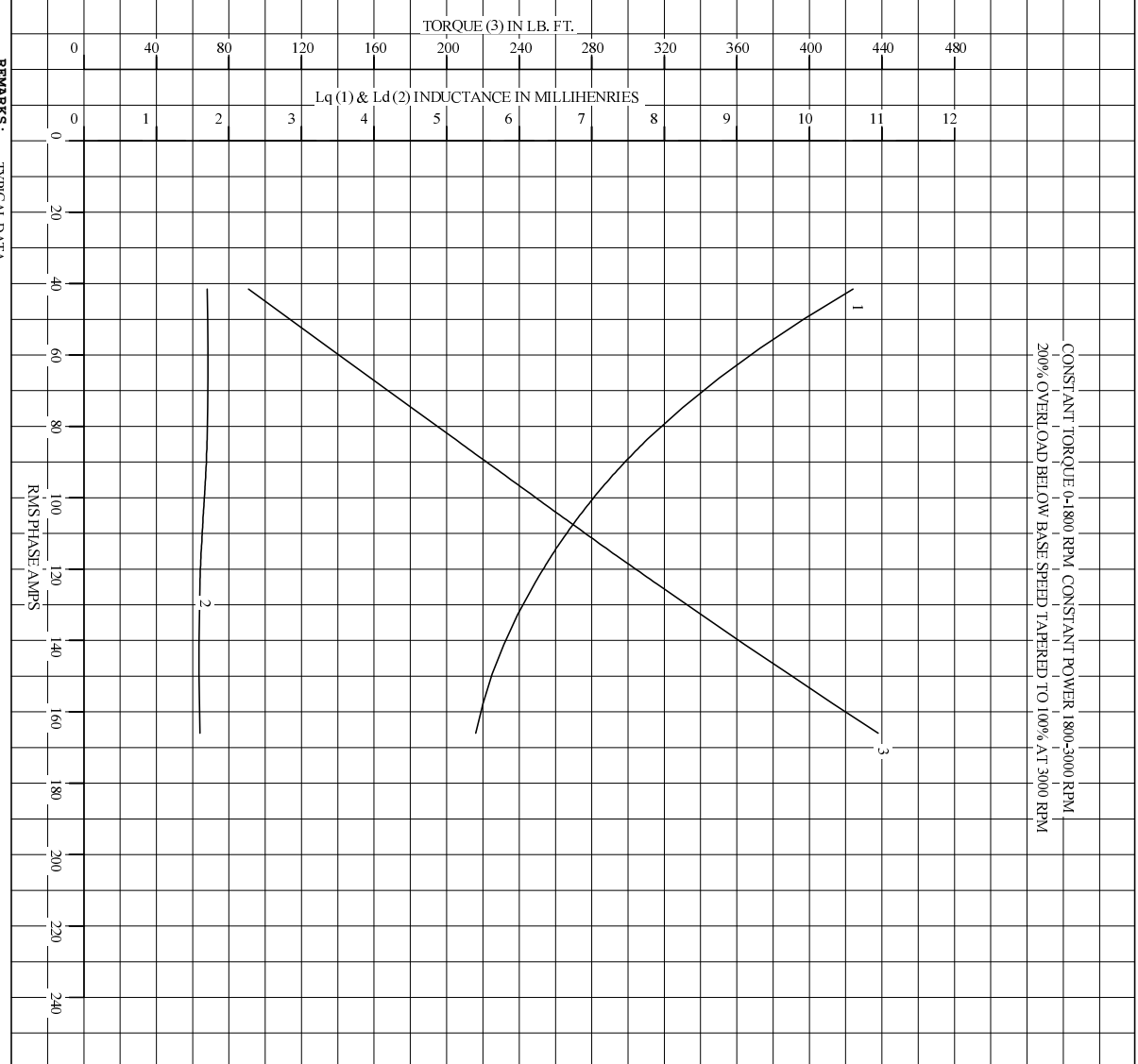


\*Gamma is the current angle relative to counter emf, defined to be positive when current leads counter emf. Equivalently, Gamma is positive when Id is negative.  
 \*\*Data at 25°C - all other data at rated temperature

<b>BALDOR</b>	DR. BY	CD	<b>IPM MOTOR PERFORMANCE DATA</b>
	CK. BY	RM	
	APP. BY	RM	
	DATE	11/23/09	
			PM4057A ISSUE DATE 11/23/09

S.O. 0      VOLTS 460      TYPE IPM      STATOR RES. @ 25 °C .0328  
 FRAME FL2890      AMPS 166.0      ENCLOSURE TEBC      OHMS (BETWEEN LINES)  
 HP 150      DUTY CONT      MAX SAFE RPM 5000  
 BASE SPEED 1800      S.F. 1.0      WK2 (Lb-Ft<sup>2</sup>) 10.56  
 PHASE/HERTZ 3/60      AMB °C/INSUL 40/H      MAX INSTANTANEOUS OVERLOAD AMPS 498

**Lq, Ld, & Torque vs. RMS Phase Amps**



REMARKS : TYPICAL DATA

**IPM MOTOR PERFORMANCE DATA**

DR. BY _____	CD _____
CK. BY RMI _____	APP. BY RMI _____
DATE 11/23/09	ISSUE DATE 11/23/09

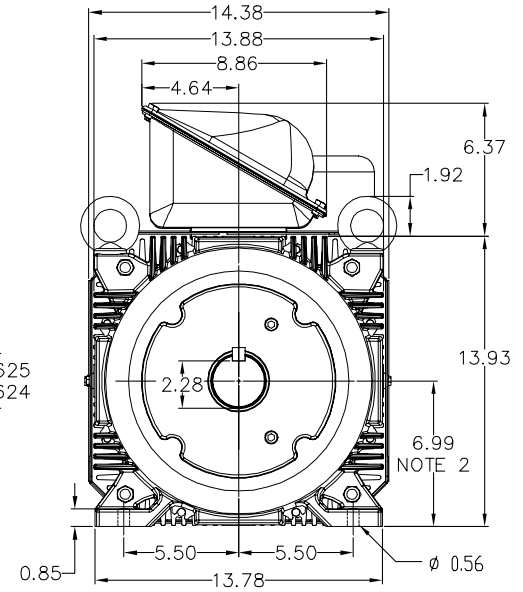
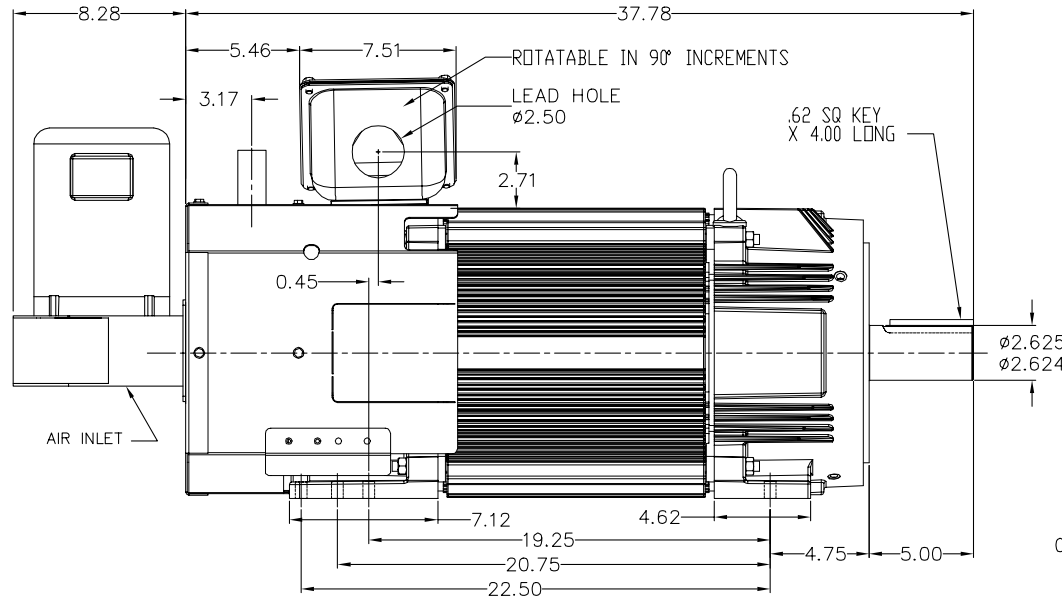
617531-025

RPM-AC FINNED FRAME VARIABLE SPEED ALTERNATING CURRENT MOTOR  
UFL & FL2890

ENCLOSURE: TOTALLY ENCLOSED  
MOUNTING: FOOT  
DRIVE METHOD: COUPLED OR BELTED

COOLING: BLOWER COOLED

ACCESSORIES: ENCODER



DIMENSIONS ARE IN INCHES  
MOTOR WEIGHT: 890 LBS. (MAY VARY 15%)

NOTE 1: D.I.E. C-FACE & TACHOMETER MOUNTING  
1/2-13 TAP, 1.00 DEEP, ON A Ø 7.25 B.C.  
FACE RUNDOUT AND ECCENTRICITY 0.004 MAX. T.I.R.

TERMINAL BOX MAY BE LOCATED F1 OR F2 IF SPECIFIED  
160 AMP STEEL TERMINAL BOX SHOWN

NOTE 2: SHAFT HEIGHT WILL NOT BE EXCEEDED  
SHIMS UP TO 0.03 INCHES IN THICKNESS ARE USUALLY  
REQUIRED FOR COUPLED OR GEARED MACHINES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THIS PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGE FAN COVER FROM 708535-10B TO -10C	VERSION: 06	TDR: 000001083672
REV. LTR: F	REVISED: 08:33:26 09/11/2018	BY: RGGWT
FILE: \RGG\00017\591		
MTL: -		

**BALDOR - RELIANCE**®

DIM SHT,FL2890Z,TEAO-BC,TACH,STD.SHAFT EXT,RMM BLWR  
SH 1 of 1

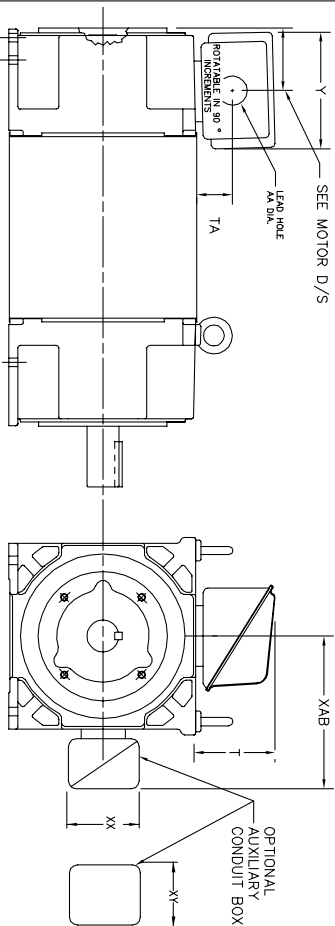
617531-025

616779-050

# INDUSTRIAL ALTERNATING CURRENT MOTORS

## RPM AC

STEEL, CAST IRON, MILL AND TERMINAL BOARD CONDUIT BOX DIMENSIONS  
 NEMA FRAMES RL210 thru RL280 and IEC FRAMES RDL132 thru RDL180  
 NEMA FRAMES FL180 thru FL280 and IEC FRAMES FDL112 thru FDL180



FRAME	TYPE	TERMINAL STRIP	AMPS	C/BOX	Y	TA	T	AA
FL180	STEEL	N	40	706320003A	5.00	1.62	3.00	1.12
FL180	STEEL	Y/N	7/5	706320005A	6.12	2.38	4.38	1.75/2.00
FL180	STEEL	N	208	706320007A	7.62	2.00	7.00	2.50/3.00
FL180 & FDL11	CAST IRON	Y/N	60	706320004C	5.75	2.38	4.38	1.0 TAP
FL180 & FDL11	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16

FL210 & RL210	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL210 & RL210	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL210 & RL210	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL210 & RL210	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL210 & RL210	MILL	Y	100	706310225R	7.75	2.30	4.40	PG29/PG16
FL210 & RL210	MILL	Y	160	706310226R	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL210 & RL210	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL250 & RL250	STEEL	N	61	075452000B	6.34	2.00	4.12	1.75
FL250 & RL250	STEEL	N	121	075454001AJ	7.69	2.38	5.25	1.94
FL250 & RL250	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL250 & RL250	CAST IRON	N	110	075460062B	7.25	2.50	5.25	1.5 TAP
FL250 & RL250	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL250 & RL250	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310225R	7.75	2.30	4.40	PG29/PG16
FL250 & RL250	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL250 & RL250	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FL280 & RL280	STEEL	N	160	706320009A	7.25	3.50	7.06	2.50
FL280 & RL280	STEEL	N	305	706320016A	9.00	4.12	8.44	4.59
FL280 & RL280	STEEL	N	500	702658001C	14.62	7.56	12.70	5.00
FL280 & RL280	CAST IRON	N	140	706320012B	9.25	4.81	8.56	3.0 TAP
FL280 & RL280	CAST IRON	N	210	706320013A	10.50	4.88	9.00	4.0 TAP
FL280 & RL280	CAST IRON	N	510	706320014D	15.00	7.56	12.81	5.0 TAP
FL280 & RL280	MILL	Y	100	706310056A	7.75	2.30	4.40	PG29/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y	160	706310056B	9.00	3.06	5.40	PG36/PG16
FL280 & RL280	MILL	Y	400	706310063B	14.39	7.43	12.15	BLANK

FRAME SIZE	XAB	OPTIMAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)							
		XX	XY	XT	YT				
FL180/TL180/RL180/FL112	7.38	4.25	4.25	603007-26-A	FL180/TL180/RL180/FL112	10.88	8.00	8.00	706310-3-B
FL210/TL210/RL210/FL132	8.44	4.25	4.25	603007-26-A	FL210/TL210/RL210/FL132	11.88	8.00	8.00	706310-3-B
FL250/TL250/RL250/FL150	9.12	4.25	4.25	603007-26-A	FL250/TL250/RL250/FL150	12.62	8.00	8.00	706310-3-B

- (1) TAP CONDUIT
- (2) TAP PIPE TAP
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) 2" DN -5A or 1" TAP DN -4C

TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM TERMINAL BOX CAN BE KEPT FOR LEAD OUTLET AT TOP SIDES OR BOTTOM SIDE. DIMENSIONS SPECIFIED IN BOX LOCATED ON TOP WHEN SPECIFIED.

050-667919

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

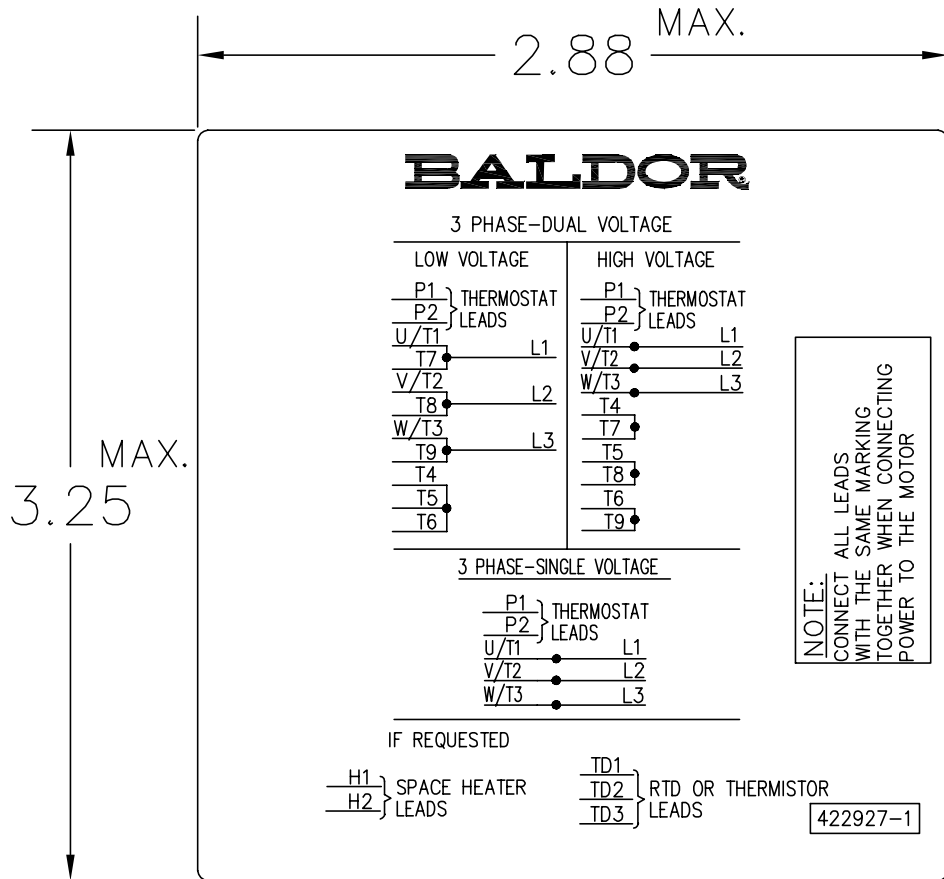
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REV. LTR: E	REVISED: 07: 27: 52 12/18/2018	BY: RGGWT
FILE: \RGG\00003\692		
MTL: -		

**BALDOR - RELIANCE®**

DIM SHT NEMA RL210-RL280 FL180-FL280 IEC RDL132-RDL180

SH 1 of 1

422927-001



NOTE:  
DATA TO BE SIZED  
SO THAT IT FITS INTO  
MATERIAL DECAL  
DIMENSIONS. MAKE  
LETTERS & NUMBERS  
AS LARGE AS POSSIBLE.

MATERIAL: CERAMATIC DGF-P4  
PERMA GRIP ADHESIVE

ALL LETTERS, NUMBERS  
AND LINES TO BE BLACK  
ON WHITE BACKGROUND.

422927-001

REV. DESC: CHANGE BACKGROUND COLOR FROM GOLD TO WHITE		
REV. LTR: B	VERSION: 02	TDR: 000000788708
FILE: \RGG\00000\203	REVISED: 08:09:29 03/04/2013	
MTL: -	BY: RGGWT	

**BALDOR**

EXTERNAL CONNECTION LABEL

SH 1 of 1

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<http://www.baldor.com/support/Literature/Load.ashx/MN406?ManNumber=MN406>